Nation's first propane fuel cell installed at Delta-Montrose Electric Association

On April 3, employees of the Delta-Montrose Electric Association, or DMEA, a Western firm power customer, made history with the startup of a 10-kilowatt propane-powered fuel cell system at DMEA's corporate headquarters in Montrose, Colo.

This prototype is reputedly the first in the nation outside of a laboratory to run on propane, a fuel readily available in areas served by rural electric cooperatives.

DMEA's propane fuel cell is the first of a series of units to be installed this spring by rural electric cooperatives working with Energy Co-Opportunities, a national cooperative created to help distribution cooperatives diversify into new energy services.

ECO recently entered into a partnership with H Power, a world leader in fuel cell technology, to bring residential and small commercial fuel cells to RECs and their members.

"Rural electric cooperatives represent an ideal market for the first wave of residential fuel cells, expected to be available in the summer of 2001," said Paul Bony, DMEA's manager of marketing and customer service, who also sits on ECO's technical advisory committee.

"There are many areas in rural America where it is prohibitively expensive to run power lines. Fuel cells offer an economical opportunity to serve these areas with clean, reliable electricity."

The spectacular San Juan Range provides a backdrop for the communities served by DMEA. The pristine environment and rugged Rocky Mountain scenery draw residents to the area, and residents value and support efforts to sustain the area's natural beauty.

"We're proud to be in the vanguard of fuel cell installations nationally," said Dan McClendon, DMEA's general manager. "Sixty-two years ago our cooperative was formed to bring electric power to rural areas at a time when for-profit utilities were not interested in providing electric service to our communities.

"Fuel cells—particularly propane-powered fuel cells—represent an exciting way to continue our mission of providing power to areas not currently served through traditional means. Fuel cells will also provide more options and benefits for all of our members."

He added, "Fuel cells also support two important cooperative values—sustainable economic development and environmental stewardship. Our board of directors is especially pleased by the positive environmental aspects of this technology."

DMEA has a history of pursuing innovative technologies. In 1998, it won Western's Administrator's Award for a geothermal heat pump program that allowed customers to pay for heating and cooling service rather than for the system. (See October 1998 *Energy Services Bulletin*.) Called chauffage, the program made geothermal systems more affordable for DMEA customers.

DMEA's latest effort could prove equally valuable to customers. It and other cooperatives could also benefit from fuel cell technology as they seek to serve new loads without building transmission lines.

DMEA unveiled its prototype fuel cell to the public on Earth Day, April 22. It will also host a press conference and industry-government forum on fuel cells featuring the propane fuel cell on May 16.

Customer profile

Delta Montrose Electric Association

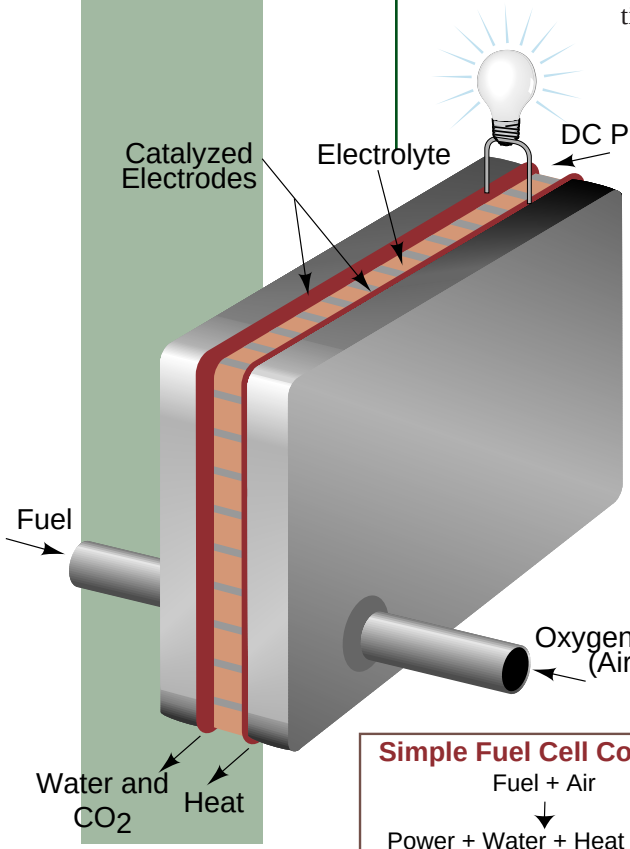
Customer type: Distribution cooperative

Region: Rocky Mountain

Service territory: Colorado's Western slope

Founded in: 1938

Headquarters: Montrose, Colo.



Simple Fuel Cell Concept

Fuel + Air

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Power + Water + Heat + CO_2